Claims

1. A shopping system for scanning codes related to products and for retrieving data associated with the codes, the shopping system comprising:

a battery-operated personal code scanner having a size and a shape such that the scanner is hand-held, the scanner including a light source for projecting a light from the scanner to the code to be scanned, an optical sensor for detecting light reflected from the code and for generating an electrical signal in response to detecting the reflected light, a microcontroller for decoding the electrical signal to decoded data, memory operatively coupled to the microcontroller for storing the decoded data and at least one identification code to identify a user of the scanner, the identification code being unique to the scanner and a user, and an infrared emitter operatively coupled to the microcontroller for transferring the identification code and the decoded data from the scanner by infrared communication;

at least a first shopping kiosk for receiving the decoded data from the scanner including a processor and an infrared receiver, the infrared receiver being configured by an application program used by the processor to enable the infrared receiver to receive the identification code by infrared communication and, upon the processor recognizing the identification code, to establish a communications data link with the scanner such that the infrared emitter can transfer the decoded code to the infrared receiver; and

at least a first host computer operatively coupled to the first shopping kiosk, the first host computer and the first shopping kiosk being configured to enable a two-way communications link between the first host computer and the first shopping kiosk, the

first host computer including a processor and memory, the processor being configured with one or more application programs to receive the decoded data from the first shopping kiosk through the communications link and to identify information related to the decoded data,

wherein, in response to identifying the information related to the decoded data, the processor selects and retrieves stored information from the memory and transmits the retrieved information to the first shopping kiosk through the communications link, and the first shopping kiosk provides the retrieved information in a useable format.

2. The system of claim 1, wherein the retrieved information includes at least one of pricing information, product features and benefits information, nutritional information, special offer information, location information, delivery information, related and similar products information, information related to decoded data the first host computer previously received, and any combination thereof.

3. The system of claim 1, wherein the first shopping kiosk further includes means for providing the decoded data transferred from the scanner in a useable format.

4. The system of claim 3, wherein the first shopping kiosk further includes means for providing the retrieved information transmitted from the first host computer in a useable format.

5. The system of claim 4, wherein means for providing one of the transferred decoded data and the retrieved information in a useable format includes a printer operatively coupled to the first shopping kiosk to provide at least one of the transferred decoded data and the retrieved information in a readable format as printed text.

6. The system of claim 4, wherein means for providing one of the transferred decoded data and the retrieved information in a useable format includes a display monitor operatively coupled to the first shopping kiosk to provide at least one of the transferred decoded data and the retrieved information in a readable format as displayed text.

7. The system of claim 1, wherein the first shopping kiosk further includes memory to store the transferred decoded data.

8. The system of claim 7, wherein the processor of the first shopping kiosk is further configured to provide the transferred decoded data in a useable format in response to identifying the identification code.

9. The system of claim 1, wherein the processor of the first host computer is further configured with one or more application programs to receive the identification code from the first shopping kiosk through the communications link, and to identify a user associated with the identification code.

10. The system of claim 9, wherein the processor of the first host computer is further configured such that, in response to identifying a user associated with the identification code, the first host computer selects and retrieves stored information associated with the identified user from the memory and transmits the retrieved information to the first shopping kiosk through the communications link, and the first shopping kiosk provides the retrieved information in a useable format.

11. The system of claim 10, wherein the retrieved information associated with the identified user includes at least one of information describing the user's personal buying history, information related to the user's preferences, information related to the user's product selections, information related to products similar to the user's product selections, and any combinations thereof.

12. The system of claim 10, wherein the first host computer is operatively coupled to one or more databases configured to store and to manage at least one of the information related to the decoded data and the information associated with the identified user.

13. The system of claim 1, wherein the first shopping kiosk is operatively coupled to a local area network of multiple shopping kiosks.

14. The system of claim 13, wherein the processor of the first shopping kiosk is further configured to transmit the decoded data transferred from the scanner through the local area network to a second shopping kiosk, wherein the second shopping kiosk receives the decoded data and provides the decoded data in a readable format.

15. The system of claim 13, wherein the first host computer is operatively coupled to the local area network and its processor is further configured to transmit the decoded data transferred from the first shopping kiosk through the local area network to one or more shopping kiosks.

16. The system of claim 15, wherein the local area network is operatively connected to the Internet, and at least one of the processor of the first shopping kiosk and the processor of the first host computer is further configured to transmit decoded data through the Internet to a second host computer.

17. The system of claim 16, wherein the processor of the first shopping kiosk processor is further configured to provide one or more local functions to the first shopping kiosk to permit user access to the decoded data transferred from the scanner to the first shopping kiosk.

18. The system of claim 17, wherein the one or more local functions of the first shopping kiosk permit a user to format the decoded data into a product order and to transmit the product order from the first shopping kiosk through the Internet to the second host computer for order fulfillment.

19. The system of claim 1, wherein the identification code includes information related to at least one of the user and the scanner.

20. The system of claim 1, wherein the scanner is further configured having a size and a shape to serve as a key fob.

21. The system of claim 1, wherein the scanner further comprises a manually operated trigger disposed in the housing and configured to activate the scanner to perform one or more functions.

22. The system of claim 1, wherein the scanner further comprises a lens disposed in the housing with at least a portion of the lens protruding from a terminal end of the housing to permit the portion of the lens to serve as a contact scanning tip, the lens being further disposed and being configured to permit light generated by the light source to shine from the scanner and to receive light reflected from the code.

23. The system of claim 1, wherein the scanner further comprises an indicator light disposed in the housing and configured with a light source to generate one of a static light beam and a flashing light beam to indicate one or more functions of the scanner.

24. The system of claim 1, wherein the microcontroller is further configured to use an application program stored in the memory to enable the scanner to decode one or more types of codes in response the microcontroller decoding a scanned control code associated with instructions to decode the one or more types of codes.

25. The system of claim 1, wherein the microcontroller is further configured to use an application program stored in the memory to enable the scanner to perform one or more functions in response to the microcontroller decoding a scanned setting code associated with instructions to perform the one or more functions.

26. The system of claim 25, wherein the one or more functions of the scanner includes the scanner providing an indication a code was scanned twice.